Routine stripping of chest tubes is not recommended.

<table>
<thead>
<tr>
<th>Class (Strength) of Recommendation</th>
<th>Class III: No Benefit (Moderate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level (Quality) of Evidence</td>
<td>Level A</td>
</tr>
</tbody>
</table>

Active maintenance of chest tube patency is effective at preventing retained blood.

<table>
<thead>
<tr>
<th>Class (Strength) of Recommendation</th>
<th>Class I (Strong)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level (Quality) of Evidence</td>
<td>Level B-R (Randomized)</td>
</tr>
</tbody>
</table>

Main Points

- Chest tubes used to evacuate shed mediastinal blood are prone to clogging with clot.
- Large volumes of retained mediastinal blood can lead to mechanical compression of the heart or lungs, resulting in the need for re-interventions.
- Smaller volumes of retained mediastinal blood promotes an inflammatory process that can contribute to the development of pleural and pericardial effusions or the triggering of atrial fibrillation.
- Retained blood is associated with increases in transfusion, AKI, time of mechanical ventilation, length of stay and mortality.
- Milking or stripping tubes has been shown to be time consuming, ineffective, and potentially harmful.
- Active tube clearance (ATC) has been shown to prevent chest tube occlusion and reduce the incidence of the retained blood in cardiac surgery patients.
- Studies have additionally shown ATC can be helpful in reducing rates of reoperation for bleeding and atrial fibrillation.

Key References


